

REMARKS

Claims 14, 18-20, 24, 25 and 27-31 are pending. By this Amendment claims 18 and 25 are amended to be in independent form and claims 30 and 31 are added.

Reconsideration in view of the above amendments and following remarks is respectfully requested.

Claims 14, 20, 27 and 28 were rejected under 35 U.S.C. §103(a) over EP-706178 A2 (EP '178) in view of Japanese Patent Publication 5-2777 (JP '777). The rejection is respectfully traversed.

Claim 14 recites a method of bonding a first planar substrate to a second planar substrate by bonding material in the form of a viscous fluid. Claim 24 recites an apparatus for bonding a first planar substrate to a second planar substrate by a bonding material in the form of a viscous fluid.

The Office Action on page 3, lines 17-19 acknowledges that EP '178 does not disclose or suggest a controller that controls a thickness of the viscous fluid on the substrate, the pump, and the plate for holding the substrate in response to the temperature of the first and/or second substrate and the temperature and/or viscosity of the viscous fluid. The Office Action then cites JP '777 as disclosing a sensor 7 that determines a temperature of a substrate and a sensor 6 that determines a temperature of the viscous fluid. The Office Action concludes that it would have been obvious to combine EP '178 and JP '777 because JP '777 teaches that "when spin coating, it is desirable to monitor coating conditions, including substrate and fluid temperatures, and to use these monitored conditions to provide an optimum coating thickness by controlling the rotational speed of the substrate." (See Page 4, lines 18-21.)

MPEP §2141.01(a) states "The Examiner must determine what is 'analogous prior art' for the purpose of analyzing the obviousness of the subject matter at issue. 'In order to rely on a reference as basis for rejection of an applicant's invention, the reference must either be

in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." MPEP §2141.01(a) further states "A reference is reasonably pertinent if even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering its problem."

It is respectfully submitted that JP '777 is non-analogous prior art to the claimed invention. It is, therefore, respectfully submitted that JP '777 may not be relied on as the basis for determining the obviousness of the claimed invention.

EP '178 discloses an optical information medium and a method for producing the optical information medium, including a first substrate, a second substrate, and a photopolymer resin film provided between the first and second substrates for bonding the first and second substrates with each other. The first substrate 1 and the second substrate 5 are integrally rotated at a high speed to make the thickness of the resin 10 substantially uniform between the first and second substrates. The thickness of the resin 10 becomes approximately 10-60 μm .

JP '777, on the other hand, is directed to a resist coating method for optical disks used as an object for optical memory. The resist coating method applies a very thin layer, 1140 angstroms or 0.114 μm , to the disk. The resist coating method and the very thin layer of resist applied to the disk of JP '777 is thus very different from the method of bonding to planar substrates using an intermediate layer of bonding material that is much thicker than the resist layer of JP '777.

It is respectfully submitted that JP '777 is not from Applicants field of endeavor, namely, a method and apparatus for bonding a first and second planar substrate by a bonding material in the form of a viscous fluid. It is also respectfully submitted that JP '777 is not reasonably pertinent to the particular problem with which Applicants were concerned and

would not have logically commended itself to Applicants' attention in considering these problems.

As discussed on page of the instant application, in achieving the objects of their invention, Applicants started out from the basic idea of taking into account varying variables which influence the coating thickness or bond coating thickness during coating, in particular during bonding, and of controlling bonding in accordance with their influence. The temperature of the substrate or substrates, the temperature of the bonding material and the viscosity of the bonding material were all taken into account as variables. JP '777, however, does not disclose or suggest bonding two substrates together. Accordingly, JP '777 would not have logically commended itself to Applicants' attention in considering the problems with which they were faced.

Even assuming *arguendo* that JP '777 is analogous prior art, the combination of EP '178 and JP '777 does not disclose or suggest all of the claimed limitations and thus the combination fails to present a *prima facie* case of obviousness. As JP '777 does not disclose or suggest bonding a second substrate to a first substrate, the combination of EP '178 and JP '777 fails to disclose or suggest controlling a thickness of the layer formed on the first substrate in response to a temperature of the second substrate, as recited in claims 14 and 24.

New claims 30 and 31 also recite controlling thickness of the layer formed on the first substrate in response to a temperature of the first substrate and a temperature of the second substrate, and it is respectfully submitted that the combination of the EP '178 and JP '777 fails to include all the limitations of new claims 30 and 31.

Claims 20, 27 and 28 recites additional features of the invention and are allowable for the same reasons discussed above with respect to claims 14 and 24 and for the additional features recited therein.

Reconsideration and withdrawal of the rejection of claims 14, 20, 24, 27 and 28 under 35 U.S.C. §103(a) over EP '178 and JP '777 are respectfully requested.

Claims 18, 19, 25 and 29 were rejected under 35 U.S.C. §103(a) over EP '178 in view of JP '777 and further in view of EP 595749 A2 (EP '749). The rejection is respectfully traversed.

Claims 18 and 25 have been amended to be in independent form, and thus include all the limitations of claims 14 and 24, respectfully. Accordingly, it is respectfully submitted that claims 18 and 25 are allowable for the same reasons discussed above with respect to claims 14 and 24. In addition, it is respectfully submitted that EP '749 fails to cure the deficiencies of the combination of EP '178 and JP '777 discussed above as EP '749 does not disclose or suggest controlling a thickness of a layer of viscous fluid formed on a first substrate in response to the temperature of a first substrate and the temperature of the second substrate. In addition, it is respectfully submitted that EP '749 is non-analogous prior art for the same reasons discussed above with respect to JP '777. In particular, it is respectfully submitted that EP '749 merely discloses controlling the thickness of a resist on a semiconductor wafer, and is not from Applicants' field of endeavor nor reasonably pertinent to the particular problems faced by Applicants as it does not disclose or suggest bonding a first and a second substrate.

Claims 19 and 29 recite additional features of the invention and are allowable for the same reasons discussed above with respect to claims 18 and 25 and for the additional features recited therein.

Reconsideration and withdrawal of claims 18, 19, 25, and 29 under 35 U.S.C. §103(a) over EP '178 in view of JP '777 and EP '749 are respectfully requested.

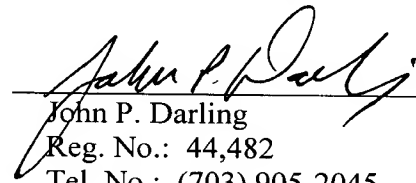
In view of the above amendments and remarks, Applicants respectfully submit that all of the claims are allowable and that the entire application is in condition for allowance.

Should the Examiner believe that anything further is desirable to place the application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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